Attorney Docket No. P64765US1 Application No. 09/779,461

Remarks/Arguments:

The specification, abstract, and drawings are amended, hereby, as required in the instant Office Action.

Claims 57-75, presented hereby, are pending.

Claims 38-56 are cancelled, hereby, without prejudice of disclaimer.

Applicants wish to thank the Examiner for timely notification of allowable subject matter.

According to the instant Office Action, claims 38, 41, 43-48, and 50-54 are allowable.

Present claims 57, 60, 62-67, and 69-73 correspond to claims 38, 41, 43-18, and 50-54, respectively. Accordingly, since claims 38, 41, 43-48, and 50-54 are allowable, present claims 57, 60, 62-67, and 69-73 are allowable.

Present claims 58, 59, 61, 68, 74, and 75 correspond to claims 39, 40, 42, 49, 55, and 56, respectively, revised to more clearly define the instant invention, as discussed, below.

Claims 39 (and 40), 42, and 49 are subject to objections. Reconsideration is requested in view of the changes to the claims effected, hereby, and the corresponding remarks, which follow.

Claim 49 (corresponding to present claim 68) was objected to as allegedly being an improper dependent claim, i.e., for allegedly failing to further limit the subject matter of a previous claim.

Claim 49 depends on claim 46, which depends on claim 38.

Claim 38 is limited to the theoretical probability distributions $P_1(n_1), P_2(n_2),...$ calculated as functions of apparent concentrations and apparent brightness which depend on the widths of the counting time intervals in the different sets.

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- Claim 46 has the additional limitation that the theoretical distributions $P_1(n_1), P_2(n_2), ...$ are calculated through their generating functions $G_{P_1(n)}(\vec{\xi}) = \sum_{n=1}^{\infty} \vec{\xi}^n P(n)$
- Claim 68 specifies how to calculate the generating function. It teaches that the generating function is calculated using the expression

$$G(\xi) = \exp\left[\int dq c(q) \int d^3 \mathbf{r} \left(e^{(\xi-1)qTB(r)} - 1\right)\right]$$

Therefore, applicants consider that claim 49 adds an additional limitation and is, therefore, in proper dependent form.

However, the Examiner has correctly pointed out that c(q) is the apparent density of particles with apparent brightness, q, T is the length of the counting time interval, and B_1 is the spatial brightness profile as a function of coordinates. Consequently, claim 49 is revised here by, as claim 68 which reads:

The method according to claim 65, wherein the generating function is calculated using the expression

$$G(\xi) = \exp\left[\int dq c(q) \int d^3 \mathbf{r} \left(e^{(\xi-1)qTB(\mathbf{r})} - 1\right)\right]$$

where c(q) is the apparent density of particles with apparent brightness q Γ is the length of the counting time interval, and $B(\mathbf{r})$ is the spatial brightness profile as a function of coordinates.

In order to overcome the objections applied against claims 55 and 56, claim 55 is rewritten hereby, as method claim 74, dependent on present generic claim 57. Claim 56 is rewritten hereby, as method claim 75, dependent on claim 74.

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Claims 55 and 56 were rejected under 35 USC 101, as being allegedly improper "use" claims.

Claims 55 and 56 were rejected under 35 USC 112, ¶2, for allegedly being indefinite, for not reciting affirmative method steps.

The rejection under §101 is overcome by the instant amendment, since none of the present claims are "use" claims.

The rejection under §112, ¶2, is overcome by the instant amendment, in that the rejected claims are revised hereby, as claims 74 and 75, to recite affirmative method steps.

Favorable action is requested.

Respectfully submitted,

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